UGS 303: Inquiry, Interpretation and Design: The art of asking questions and finding answers

Welcome to IID! This course is an inquiry and design-thinking course. We will be exploring how we can ask questions in a way that sparks innovation in ourselves and others and helps us understand the world and our fellow humans a bit better. The semester will start off with a deep dive into the how's and why's of questioning by reading *A More Beautiful Question* by Warren Berger. We will then work to apply these techniques beginning with an inquiry project of your choosing and ending with practicing asking hard questions to understand others better and find common ground.

Course Instructor: A. Katie Hansen

k.hansen@austin.utexas.edu

Office: BME 2.518

Office hours: Wednesday 11-12 or Thurs 11:30-12:30 via zoom and announced on Canvas.

You may arrange meetings outside this time via email. I'd love to meet with you.

Course meeting times:

Lecture T/TH 8:00-9:30

Discussion Sections: Section 60450-Thursday 2:00 Section 60455- Thursday 3:00 Section 60460- Thursday 4:00

Course Texts: A More Beautiful Question: Using the Power of Inquiry to Spark Breakthrough Ideas by Warren Berger. You can find this on Amazon for \$11.79 in paperback or \$10.49 on Kindle. You will need to read the first chapter by next Tuesday. For the Kindle version, you can read it on any computer with the kindle cloud reader in a browser (like Safari or Chrome) or download the kindle app on your smartphone or tablet if you have one. You do not need a kindle reader. I will provide the rest of the readings we will use during the semester. You may also be able to check out a digital download via your local library.

 $\frac{\text{https://www.amazon.com/More-Beautiful-Question-Inquiry-}}{\text{Breakthrough/dp/1632861054/ref=sr_1_1?dchild=1\&keywords=a+more+beautiful+question}} \\ \frac{\text{negid=1598279228\&sr=8-1}}{\text{negid=1598279228\&sr=8-1}}$

Learning Goals:

The goals of this course are to prepare you to be better thinkers and to practice the skills that lay the groundwork for success at UT and beyond. You will practice using your creativity to ask questions and try to answer them. Through that process, you will also learn how to fail well and solve problems, how to collaborate and communicate and analyze ideas critically.

Although we will practice these skills within the context of inquiry, our goal is simply to emerge from this course as better thinkers and colleagues.

The lecture and discussion are two integrated learning experiences. In lecture, you will learn concepts and tools specific to nutrigenomics and to research in general. In discussion sections you will apply those skills.

This course fulfills the criteria for a Signature Course

(http://www.utexas.edu/ugs/sig/essentials/content).

Specifically, this course will have:

- Interdisciplinary and Contemporary Content: You will be reading and critiquing current scientific literature. This course is interdisciplinary by nature as you will not only be learning about topics across scientific disciplines and how that information relates to some of the major scientific controversies of our time, but also how scientific discovery interfaces with the real world in the form of policy and ethics.
- **Information literacy:** Beyond Google. In this course, the library is your friend. You will learn how to research current and historical scientific information and how to properly cite your work.
- Written and Oral Communication: The most amazing scientific discovery in the world is useless unless it is effectively communicated to a wider audience. We will work closely with you to help you learn how to communicate effectively in both an oral and written form.
- **University Lecture Series:** All signature courses are required to attend an official University of Texas lecture. A portion of your grade will depend on your attendance and a written assignment based on the lecture. Please see the assignment on canvas for qualifying lectures.
- **Gems:** The University of Texas at Austin has several very unique resources. These collections and tools can help you develop new ideas and enrich your educational experience. You will be required to attend (and provide documentation and reflection of said attendance) of two of these throughout the semester. Further details will be posted on Canvas at a later date. **We will arrange a special Blanton experience that will be required and will count as one GEM.** You can see a list of UT GEMS here http://www.utexas.edu/ugs/sig/essentials/gems
- **Drop Dates:** September 11th is the last date to drop for possible refund. Please get in touch if you are considering dropping this class. I'd hate for you to drop if there is a potential solution.

COVID Specific class meeting policy: Our class is a hybrid course. This means that it is my intention to offer in-person classes on a rotating basis for those who desire to attend, and virtual classes for those who prefer that method. In-person attendance will never be required. Synchronous attendance is required for both lectures and discussion sections. Our learning goals require us to work together, so we must all be present to achieve them.

Watching what is happening to Universities across the country that opened for in-person classes a bit earlier than we have, has given me pause. Your safety is my most critical concern and I'd prefer not to just dive in before we know how our campus community and Austin will respond to the challenge of COVID. So we will meet exclusively online for the first two weeks of classes and then re-evaluate based on how our community at UT is doing. I hope to see many of you in person very soon.

Lectures will be recorded and posted to canvas.

Discussion sections will be held on zoom for the entire semester. We will reevaluate lecture attendance weekly based on current COVID19 conditions (except for remote students who will participate fully online).

We really are living in unprecedented times. Communication and support are our keys to getting through this together and thriving rather than just surviving. Let me know how I can help you thrive.

Course Policies

Safety and Class Participation/Masks: We will all need to make some adjustments in order to benefit from in-person classroom interactions in a safe and healthy manner. Our best protections against spreading COVID-19 on campus are masks (defined as cloth face coverings) and staying home if you are showing symptoms. Therefore, for the benefit of everyone, this is means that all students are required to follow these important rules.

- Every student must wear a cloth face-covering properly in class and in all campus buildings at all times. To adequately protect yourself and others, bandanas or gators are not acceptable masks for this class. Masks must fully cover your face and nose.
- You will have your temperature taken before entering the class space
- Students are encouraged to participate in documented daily symptom screening. This means that each class day in which on-campus activities occur, students must upload certification from the symptom tracking app and confirm that they completed their

symptom screening for that day to Canvas. Students should not upload the results of that screening, just the certificate that they completed it. If the symptom tracking app recommends that the student isolate rather than coming to class, then students must not return to class until cleared by a medical professional.

• If a student is not wearing a cloth face-covering properly in the classroom (or any UT building), that student must leave the classroom (and building). If the student refuses to wear a cloth face covering, class will be dismissed for the remainder of the period, and the student will be subject to disciplinary action as set forth in the university's Institutional Rules/General Conduct 11-404(a)(3). **ANY STUDENT WHO VIOLATES THE MASK POLICY WILL NOT BE ALLOWED TO ATTEND IN-PERSON SESSIONS**. Students who have a condition that precludes the wearing of a cloth face covering must follow the procedures for obtaining an accommodation working with Services for Students with Disabilities.

Sharing of Course Materials is Prohibited: No materials used in this class, including, but not limited to, lecture hand-outs, videos, assessments (quizzes, exams, papers, projects, homework assignments), in-class materials, review sheets, and additional problem sets, may be shared online or with anyone outside of the class unless you have my explicit, written permission. Unauthorized sharing of materials promotes cheating. It is a violation of the University's Student Honor Code and an act of academic dishonesty. Materials found online that are associated with you, or any suspected unauthorized sharing of materials, will be reported to Student Conduct and Academic Integrity in the Office of the Dean of Students. These reports can result in sanctions, including failure in the course.

Class Recordings: Class recordings are reserved only for students in this class for educational purposes and are protected under FERPA. The recordings should not be shared outside the class in any form. Violation of this restriction by a student could lead to Student Misconduct proceedings.

COVID Caveats: To help keep everyone at UT and in our community safe, it is critical that students report COVID-19 symptoms and testing, regardless of test results, to <u>University Health Services</u>, and faculty and staff report to the <u>HealthPoint Occupational Health Program</u> (OHP) as soon as possible. Please see this <u>link</u> to understand what needs to be reported. In addition, to help understand what to do if a fellow student in the class (or the instructor or TA) tests positive for COVID, see this <u>University Health Services link</u>.

Attendance: Attendance synchronously is required. We will be doing daily group work on projects, group activities and graded assessments. It is not possible to receive credit for many of these activities unless you attend class. If you will need to miss a class period, please get in touch with Dr. Hansen prior to missing class. If you are ill, please get in touch with Dr. Hansen and accommodations can be made. **Missing three unexcused class or lab periods will**

result in a ½ of a letter grade reduction. So for example, if you earned an A for this course, having three unexcused absences will result in the letter grade of an A-.

Absences

If you are absent or unable to participate on the day that your team meets, you are responsible for providing your team with the necessary information to compensate for your absence. It is crucial to keep in communication with your team members; you are responsible for letting both us and your team know if you cannot make it to a class.

Excused Absence: The only absences that will be considered excused are for religious holidays or extenuating circumstances due to an emergency. If you plan to miss class due to observance of a religious holiday, please let us know at least two weeks in advance. You will not be penalized for this absence, although you will still be responsible for any work you will miss on that day if applicable. Check with us for details or arrangements.

If you have to be absent, use your resources wisely. Ask your team and other classmates to get a run-down and notes on any lessons you miss. If you find there are topics that we covered while you were gone that raise questions, you may come by during office hours or schedule a meeting to discuss. Email specific questions you have in advance so that we can make the most of our time. "What did I miss?" is not specific enough.

Grading Policy: Everyone comes into this course with different backgrounds, experiences and competencies. We can all get better and my grading policy emphasizes improvement and application of the skills we are learning over the course of the semester. What got you an A early in the semester may not result in an A at the end. Our goal is to get better!

The majority of in-class assessments are participation grades i.e.: you must attend class and participate to get credit for those assessments. Participation grades cannot be made up. You do, however, get to drop one with no penalty. Missing more than 5 minutes of an in-class assessment or activity will result in a 0 for that activity.

The grading scale for this course is as follows:

Please note: to ensure fairness and a hard-target, all numbers are absolute and will not be rounded up or down at any stage. Thus, a B- will be inclusive of all scores of 80.000 through 83.999. The University does not recognize the grade of A+.

Late Work policies: Without *prior* approval, late work will be deducted 10% per day (but see Grace policy below). Science can often be finicky and unpredictable and we are also living in unprecedented COVID19 times. If you are struggling with your research project, come talk to me before the due date.

GRACE POLICY: Time-bank options

Sometimes we have bad days, bad weeks, and bad semesters. In an effort to accommodate any unexpected, unfortunate personal crisis, I have built "time banks" into our course. You do not have to utilize this policy, but if you find yourself struggling with unexpected personal events, I encourage you to e-mail me as soon as possible to notify me that you are using my grace policy. You may use this policy one of two ways (please choose, and let me know): You may have a two-day grace period for one assignment, OR You may have 2 one-day extensions for two different assignments.

Time-bank options cannot be applied to in-class activities.

Tentative Course Schedule

Week	Tuesday Lecture	Thursday Lecture	Discussion Section
August 24	No Lecture	Intro to Class	No Discussion Sections
August 31	Chapter 1 in book	Chapter 2 in book	Meet with mentors Group Activity
September 7	Chapter 3-4 in book	Chapter 5 in book	
September 14	Peer Review Literature/ Finding a scientific rationale	Information Literacy	Reflection 1 due
September 21	Project introduction How do we ask the right questions	Leading across boundaries/Group work	Group work
September 28	Question Storm in groups	Refine Project Ideas	Meet with Dr. Hansen on project
October 5	Understand Deeply	Failure	Reflecction 2 due
October 12	How do we know what our data is telling us?	How do we know things are different	Meet with Dr. Hansen on project/Pilot project video due
October 19	How do we know one answer is better than another?	How do we predict the future?	Project work
October 26	Ethics/Having Hard Conversations/Com mon ground	Ethics Work sessions	Project work Meet with Dr. Hansen

November 2	Ethics work sessions	Ethics/Having Hard	Meet with Dr.
		Conversations	Hansen on project
November 9	Ethics/Having Hard	Ethics/Having Hard	Work on Projects
	Conversations	Conversations	
November 16	Ethics/Having Hard	Ethics/Having Hard	Meet with Dr.
	Conversations	Conversations	Hansen on project
November 23	Ethics/Having Hard	Final	
	Conversations	Videos/Presentations	
December 2	Final	Final	
	Videos/Presentations	Videos/Presentations	
December 9	Final Reflection Due		

Assessments

While major projects will not change, the number of in-class activities may vary from this exact number.

In-class activities = 100 points (you many drop one for no penalty)

Project -135 points

- -Proposal 25 points
- -Pilot Study and Video- 50 points
- -Final Presentation or Video 50 points
- -Peer Review 10 points

Having hard conversations/Ethics 100 points

- -Discussion 50 points
- -Participation- 50 points

UGS Requirements - 50 points

- -University Lecture Series Reflection Essay 15 points
- -Blanton Gem 25 points
- -Free choice Gem 15 points

University Policies

Accommodations: Students with disabilities should notify Dr. Hansen of any necessary accommodations by providing a letter from the UT's Services for Students with Disabilities office by the 12th class day.

Religious holidays: UT Austin's policy on religious holidays states that you must provide me with notification of your absence from a class activity or quiz 14 days prior to the observed holiday. You will then be given an appropriate amount of time to make it up. It is expected that papers or long-term assignments will be turned in prior to the holiday.

Academic Integrity:

Please familiarize yourself with UT's academic integrity policy. Academic dishonesty, *including falsification of data*, is strictly penalized. http://deanofstudents.utexas.edu/conduct/academicintegrity.php

"A fundamental principle for any educational institution, academic integrity is highly valued and seriously regarded at The University of Texas at Austin. More specifically, you and other students are expected to maintain absolute integrity and a high standard of individual honor in scholastic work undertaken at the University. This is a very basic expectation that is further reinforced by the University's Honor Code. At a minimum, you should complete any assignments, exams, and other scholastic endeavors with the utmost honesty, which requires you to:

- acknowledge the contributions of other sources to your scholastic efforts;
- complete your assignments independently unless expressly authorized to seek or obtain assistance in preparing them;
- follow instructions for assignments and exams, and observe the standards of your academic discipline; and
- avoid engaging in any form of academic dishonesty on behalf of yourself or another student."